AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

In the paragraph beginning on page 8, line 8, please amend the present specification as follows:

While referring to a distance-correction value S, the shading-correction coefficient calculating unit 24 decides a correction coefficient, based on a preliminarily set look-up table. Fig. 2 represents an example of a look-up table utilized in the shading-correction coefficient calculating unit 24. For example, in ~~Fig. 3~~ Fig. 2, by, with regard to distance-correction values S, defining (m + 1) points from 0 to m × N, with a constant space N (m is a positive integer), respective correction coefficients K_0 to K_m corresponding to the points are preliminarily determined.

In the paragraph beginning on page 8, line 16, please amend the present specification as follows:

Fig. 3 represents a method of obtaining the correction coefficient K from a distance-correction value S, by utilizing a look-up table. In Fig. 3, the abscissa indicates the distance-correction values S to be referred, and the ordinate indicates the correction coefficients K obtained with reference to the distance-correction values S. ~~Fig. 4~~ Fig. 3 is an example of the case where, as is the case with ~~Fig. 3~~ Fig. 2, (m + 1) points from 0 to m × N are defined with a constant space N (m is one or a larger integer), with regard to distance-correction values S. By preliminarily measuring properties of shading in an image pickup apparatus to be used, the

values in the look-up table in ~~Fig. 3~~ Fig. 2 are determined so as to, along with coefficients set in the distance correcting unit 23, most effectively correct shading, and the coefficients are stored in an unillustrated storage area. In addition, provision is made for a mechanism to be able to change the values of these coefficients to arbitrary values, by setting through the image pickup controlling unit 18.

In the paragraph beginning on page 15, line 4, please amend the present specification as follows:

The distance calculating unit 22 calculates the distance between the reference point and a pixel, based on the coordinate values of the pixel and the reference point. The method of calculating the ~~distance S~~ distance D is the same as that in Embodiment 1; however, the method is utilized with the reference point being switched depending on which color among R, G, and B the pixel data is for. Supposing that the coordinate values of a pixel is (x, y) and that the coordinate values of an R reference point, a G reference point, and a B reference point are (x_R, y_R), (x_G, y_G), and (x_B, y_B), respectively, the ~~distances S~~ distances D for an R pixel, a G pixel, and a B pixel are given according to Equation (4), (5), and (6), respectively.

In the paragraph beginning on page 19, line 7, please amend the present specification as follows:

In Fig. 6, the image pickup apparatus is made up of an image pickup lens 11 having an optical zooming function, a diaphragm mechanism 12 for adjusting the amount of incident light to a camera, a CCD (Charge Coupled Device) 13 that is a photoelectric transducer, an analog-

signal processing unit 14, an analog/digital converter (AD converter) 15, a digital-signal processing unit 16, an photographic image data outputting unit 17 for storing a photographic image data in a storage area, and an image pickup controlling unit 18 for controlling the optical zooming function and the diaphragm mechanism, and for changing settings for a horizontal-distance correcting unit 23a, a vertical-distance correcting unit 23b, a horizontal-shading-correction coefficient calculating unit 24a, and a vertical-shading-correction coefficient calculating ~~unit 23b~~ unit 24b, in a shading-correction processing section 20 described later.